

## Social Security Administration



The SSA's need for additional ground floor space encompassed the surrounding lawn so a green roof was designed to mitigate stormwater runoff. The insulating value of the green roof and the building envelope, including high-efficiency glazing and calcium silicate masonry units,

resulted in a zero net gain for major HVAC equipment in spite of doubling the square footage and occupancy.

***2'x4' and 2'x2' "vegetative pavers" contain hearty plants in a low-profile growing medium and the grid system allows easy installation of units and monitoring of roof conditions below.***

***The layers of a vegetative roof can be seen during installation.***

## U.S. Border Station



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Sault Sainte Marie,  
Michigan

**Architect:**  
Ross Barney + Jankowski

**Contractor:**  
Bird Construction USA

**Size:**  
38,750 gsf

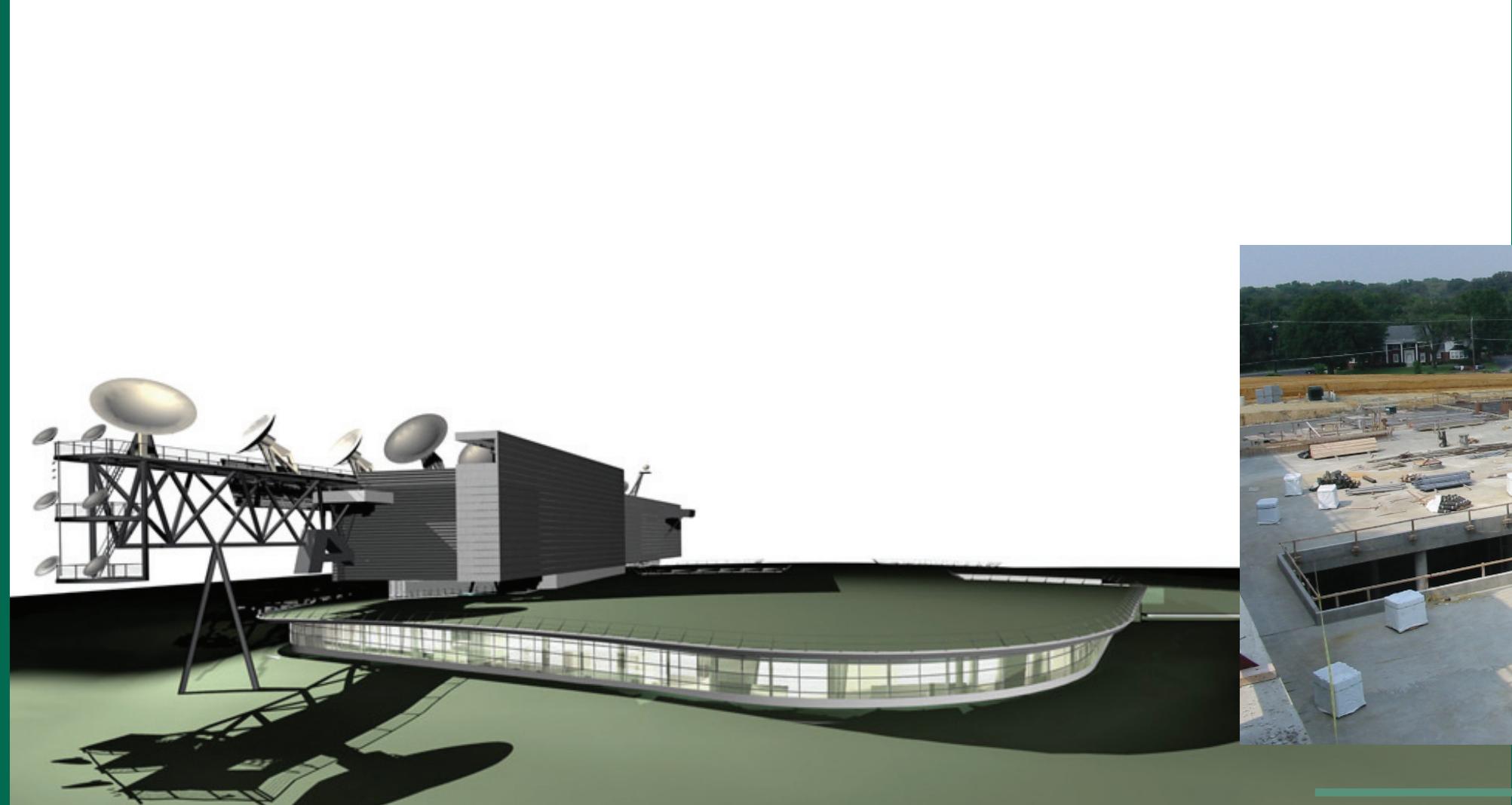
**Budgeted cost:**  
\$12.6 million

**Completion:**  
August 2005

**Green roof area:**  
20,000 sf

Site constraints along with the complex functions of security and traffic movement through a port of entry led to this green roof solution. The vegetative roof of low maintenance sedums adds insulating value and blends the building with the site. Without a green roof, almost the entire site would be impervious surfaces requiring costly water retention and filtering solutions.

## NOAA Satellite Operations Center



**National Oceanic and Atmospheric Administration**

*Suitland Federal Center*

*Suitland, Maryland*

**Architect:**

Morphosis/Einhorn Yaffee

Prescott

**Contractor:**

P.J. Dick Inc.

**Size:**

208,271 gsf

**Budgeted cost:**

\$61 million

**Completion:**

September 2005

**Green roof area:**

146,000 sf

The NOAA Satellite Operations Center will house current and future environmental satellite operations of national and global significance. GSA is building a new facility that not only enhances NOAA's mission but also expresses the function of the building. The desire to create a low-impact building in keeping with the scale of surrounding structures led to a green roof design that merges with the landscape.

***Only 20% of the site becomes impervious, eliminating the need for a water detention pond or increased stormwater piping, while saving thousands of dollars.***